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Request for Continued Examination (RCE) Transmittal

Address to:
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P.O. Box 1450
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Application Number	10/512,140
Filing Date	10/22/2004
First Named Inventor	CLARK, et al.
Art Unit	1797
Examiner Name	Ellen M. McAvoy
Attorney Docket Number	TS7607US

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. Submission required under 37 CFR 1.114 Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

   a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

      i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

      ii. ☐ Other _____

   b. ☑ Enclosed

      i. ☑ Amendment/Reply

      ii. ☐ Affidavit(s)/ Declaration(s)

      iii. ☑ Information Disclosure Statement (IDS)

      iv. ☐ Other _____

2. Miscellaneous

   a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

   b. ☐ Other _____

3. Fees The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

   a. ☑ The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to Deposit Account No. 19-1800 (TS7607) maintained by Shell Oil Company.

      i. ☑ RCE fee required under 37 CFR 1.17(e)

      ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)

      iii. ☐ Other _____

   b. ☐ Check in the amount of $ _____ enclosed

   c. ☐ Payment by credit card (Form PTO-2038 enclosed)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Signature	/Paula D. Morris/	Date	1-15-2010
Name (Print/Type)	PAULA D. MORRIS	Registration No.	31,516

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature	/Ann Marie Alaniz/	via Facsimile Page 1 of	20
Name (Print/Type)	ANN MARIE ALANIZ	Date	1-15-2010

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RICHARD HUGH CLARK	§	Group Art Unit: 1797
SERIAL NO.: 10/512,140	§	Examiner: Ellen M. McAvoy
FILED: October 22, 2004	§	Atty. Docket: TS7607US
TITLE: Diesel Fuel Compositions	§	Confirmation No.: 1942

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Response to Final Action Mailed November 16, 2009

This paper is filed in response to the final action mailed November 16, 2009. In this response:

Amendments to the Claims begin at p. 2.

Remarks/Arguments begin at page 8.

Amendments to the Claims

1.-85. (Canceled).

86. (New) A method for removing injector fouling in a diesel engine, the method comprising:

providing a fouled diesel engine comprising an initial level of injector fouling comprising combustion related deposits, as evidenced in the laboratory by an initial fouling index; and,

removing at least some of the combustion related deposits, thereby producing a cleaned diesel engine having a reduced level of injector fouling, as evidenced in the laboratory by a reduced fouling index;

the removing comprising combusting in the diesel engine a fuel blend under conditions effective to produce the cleaned diesel engine, the fuel blend comprising:

(a) a standard diesel fuel composition comprising less than 1 %w/w Fischer-Tropsch derived gas oil and less than 50 ppmw detergent; and

(b) an amount of 10% w/w or more Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C.

87. (New) The method of claim 86 wherein the fuel blend comprises about 50% w/w or more of the Fischer-Tropsch derived gas oil.

88. (New) The method of claim 86 wherein the fuel blend comprises about 70% w/w or more of the Fischer-Tropsch derived gas oil.

89. (New) The method of claim 86 wherein the fuel blend comprises 100% w/w of the Fischer-Tropsch derived gas oil.

90. (New) The method of claim 86 wherein, after three hours' engine running in the laboratory using the standard diesel fuel, one or more engine nozzles in the diesel engine exhibits a reduction in achievable air flow rate of greater than 35%.

91. (New) The method of claim 86 comprising increasing the removal of the combustion related deposits by providing the fuel blend with a sufficient concentration of active matter detergent, the increase in removal being evidenced in the laboratory by a further reduced fouling index.

92. (New) The method of claim 86 comprising increasing the removal of the combustion related deposits by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

93. (New) The method of claim 87 comprising increasing the removal of the combustion related deposits by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

94. (New) The method of claim 88 comprising increasing the removal of the combustion related deposits by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

95. (New) The method of claim 89 comprising increasing the removal of the combustion related deposits by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

96. (New) The method of claim 90 comprising increasing the removal of the combustion related deposits by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

97. (New) A method for removing injector fouling in a diesel engine, the method comprising:

providing a fouled diesel engine comprising an initial level of injector fouling comprising combustion related deposits, as evidenced in the laboratory by an initial fouling index; and,

removing a quantity of the initial level of injector fouling by combusting in the diesel engine a fuel blend under conditions effective to produce a cleaned diesel engine, as evidenced in the laboratory by a reduced fouling index which is 6% or more lower than the initial fouling index, the fuel blend comprising:

(a) a standard diesel fuel composition comprising less than 1 %w/w Fischer-Tropsch derived gas oil and less than 50 ppmw detergent;

(b) an amount of Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C, the amount being sufficient to produce the reduced fouling index; and,

(c) optionally from about 20 to about 500 ppm active matter detergent.

98. (New) The method of claim 97 wherein the reduced fouling index is 9% or more lower than the initial fouling index.

99. (New) A method for reducing injector fouling during operation of a diesel engine, the method comprising:

providing a diesel engine which produces a first level of injector fouling comprising combustion related deposits when operated under given conditions using a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil and less than 50 ppmw detergent, as evidenced in the laboratory by a first fouling index; and,

reducing the quantity of combustion related deposits produced by the diesel engine during operation, as evidenced in the laboratory by a reduced fouling index, by operating the diesel engine using a fuel blend comprising:

(a) the standard diesel fuel composition, and

(b) an amount of about 10 w/w% or more of Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C.

100. (New) The method of claim 99 wherein the fuel blend comprises about 50% w/w or more of the Fischer-Tropsch derived gas oil.

101. (New) The method of claim 99 wherein the fuel blend comprises about 70% w/w or more of the Fischer-Tropsch derived gas oil.

102. (New) The method of claim 99 wherein the fuel blend comprises 100% w/w of the Fischer-Tropsch derived gas oil.

103. (New) The method of claim 99 wherein, after three hours' engine running in the laboratory using the standard diesel fuel, one or more of the engine nozzles exhibits a reduction in achievable air flow rate of greater than 35%.

104. (New) The method of claim 99 comprising further reducing the quantity of combustion related deposits produced by the diesel engine by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

105. (New) The method of claim 100 comprising further reducing the quantity of combustion related deposits produced by the diesel engine by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

106. (New) The method of claim 101 comprising further reducing the quantity of combustion related deposits produced by the diesel engine by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

107. (New) The method of claim 102 comprising further reducing the quantity of combustion related deposits produced by the diesel engine by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

108. (New) The method of claim 103 comprising further reducing the quantity of combustion related deposits produced by the diesel engine by providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw.

109. (New) A method for reducing injector fouling during operation of a diesel engine, the method comprising:

providing a diesel engine which produces a first level of injector fouling comprising combustion related deposits when operated under given conditions using a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil and less than 50 ppmw detergent, as evidenced in the laboratory by a first fouling index; and,

reducing the quantity of combustion related deposits produced by the diesel engine during operation, as evidenced in the laboratory by a reduced fouling index that is 6% or more lower than the first fouling index, the reducing comprising operating the diesel engine using a fuel blend comprising:

(a) the standard diesel fuel composition,

(b) an amount of Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C., the amount of Fischer-Tropsch derived gas oil being sufficient to produce the reduced fouling index; and,

(c) optionally from about 20 to about 500 ppm active matter detergent.

110. (New) The method of claim 109 wherein the reduced fouling index is 9% or more lower than the first fouling index.

111. (New) A method for removing and/or reducing injector fouling in a diesel engine, the method comprising combusting in the diesel engine a fuel blend comprising 100% Fischer Tropsch derived gas oil and from about 100 ppmw to about 500 ppmw active matter detergent.

112. (New) A method for removing combustion related deposits from a surface, the method comprising:

providing a surface comprising combustion related deposits produced by operating a diesel engine; and,

removing at least a portion of the combustion related deposits from the surface by contacting the surface with a fuel blend under removal conditions, the fuel blend comprising: (a) a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil and less than 50 ppmw detergent, and (b) an amount of about 10 w/w% or more of Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C.

113. (New) A diesel fuel composition for an internal combustion engine of the compression ignition type comprising a fuel blend comprising:

a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil and less than 50 ppmw detergent; and,

30% w/w or more Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C.

114. (New) The diesel fuel composition of claim 113 comprising 50% w/w or more of the Fischer-Tropsch derived gas oil.

115. (New) The diesel fuel composition of claim 113 comprising 70% w/w or more of the Fischer-Tropsch derived gas oil.

116. (New) The diesel fuel composition of claim 113 further comprising a quantity of from about 20 to 500 ppmw active matter detergent based on the fuel blend.

117. (New) The diesel fuel composition of claim 113 further comprising from about 100 ppmw to about 500 ppmw active matter detergent based on the fuel blend.

118. (New) The diesel fuel composition of claim 114 further comprising from about 100 ppmw to about 500 ppmw active matter detergent based on the fuel blend.

119. (New) The diesel fuel composition of claim 115 further comprising from about 100 ppmw to about 500 ppmw active matter detergent based on the fuel blend.

120. (New) A diesel fuel composition for an internal combustion engine of the compression ignition type comprising a fuel blend comprising:

a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil and less than 50 ppmw detergent; and,

10% w/w or more of Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C;

wherein:

(a) the standard diesel fuel composition exhibits a property selected from the group consisting of a sufficiently high endpoint, a sufficient level of aromatic components, and combinations thereof, that one or more engine nozzles of a compression ignition type engine exhibits a reduction in achievable air flow rate of greater than 35% when the compression ignition engine is run for three hours in the laboratory using the standard diesel fuel composition; and,

(b) when the compression ignition engine is run in the laboratory under comparable conditions using the fuel blend, the one or more engine nozzles of the compression ignition type engine exhibit an increased air flow rate.

121. (New) The diesel fuel composition of claim 120 comprising 30% w/w or more of the Fischer-Tropsch derived gas oil.

122. (New) The diesel fuel composition of claim 120 comprising 50% w/w or more of the Fischer-Tropsch derived gas oil.

123. (New) The diesel fuel composition of claim 120 comprising 70% w/w or more of the Fischer-Tropsch derived gas oil.

124. (New) The diesel fuel composition of claim 120 further comprising a quantity of from about 20 to 500 ppmw active matter detergent based on the fuel blend.

125. (New) The diesel fuel composition of claim 120 further comprising from about 100 ppmw to about 500 ppmw active matter detergent based on the fuel blend.

126. (New) The diesel fuel composition of claim 122 further comprising from about 100 ppmw to about 500 ppmw active matter detergent based on the fuel blend.

127. (New) The diesel fuel composition of claim 123 further comprising from about 100 ppmw to about 500 ppmw active matter detergent based on the fuel blend.

REMARKS

Applicant has carefully studied the final action mailed November 16, 2009, and submits the following response. In the response, claims 1-85 are canceled and new claims 86-127 are added. All of the pending claims are believed to be in condition for allowance for all of the following reasons.

Rejection of claims as obvious over Berlowitz

The examiner rejected claims 43-45, 48-51, 54-60, 63-72, 76-80, 84, and 85 as obvious over U.S. Patent No. 6,663,767 to Berlowitz, ("Berlowitz"). The examiner found applicant's arguments unpersuasive. The examiner maintains that Berlowitz discloses a blended diesel fuel composition meeting the claims, and that "the blended fuel demonstrates better than expected emissions and reduced sulfur content when used in a diesel engine." Final action, p. 2. The examiner contends that "the Fischer-Tropsch derived hydrocarbon distillate of Berlowitz meets the limitations of the Fischer-Tropsch derived gas oil of the clams." Final action, p.3. The examiner comments that "significantly lower emissions and particulate matter were produced from" Berlowitz' diesel fuel blend "when compared to two different conventional diesel fuels." Final Action, pp. 2-3

The examiner dismisses Applicants argument that Berlowitz does not disclose a method of removing or reducing injector fouling and/or combustion related deposits in a diesel engine, maintaining that "the method of the independent clams essentially comprises the step of combusting in the diesel engine a fuel blend comprising an amount (unspecified) of Fischer-Tropsch derived gas oil which is clearly taught by Berlowitz as set forth above." Final action, p. 3.

The examiner also states that, "[a]ccording to applicant, the reduction of injector fouling and/or engine deposits of the claims is not disclosed in Berlowitz and the examiner has not established that removing injector fouling is an **established function** of the claimed fuel blend." Office action p. 4. The examiner admits that "reducing injector fouling and/or engine deposits is not specifically set forth in Berlowitz," but contends that "reduction of particulate matter is briefly discussed in column 7, lines 37-40." Final action, p. 3. The examiner asserts that "the combination of familiar elements according to known methods is likely to be obvious when it does nothing more than yield predictable results." citing *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007). The examiner contends that "if a claim extends to what is obvious, it is not

patentable under § 103. Id. The examiner contends that "there is no evidence of record that the reduction of injector fouling and/or engine deposits in diesel engines is an unexpected result based on supposedly unpredictability of the blended diesel fuel composition disclosed in Berlowitz." Final Action, p. 5.

Response

Claims 1-85 have been canceled.

-New claims 90 and 96; 103 and 108

The specification explains that:

> The Fischer-Tropsch derived gas oil may in particular be used to enhance the performance of a fuel or fuel blend which would otherwise cause relatively high levels of combustion related deposits, for instance a fuel having a relatively high endpoint and/or containing relatively high levels of aromatic components, and/or of a fuel or blend which causes, after three hours' engine running, a reduction in the achievable air flow rate through one or more of the engine nozzles of greater than 35 or 40 or 45% for instance measured using the test protocol described below.

Specification, p. 9, ll. 19-29. Accordingly, new claims 90 and 103 specify that "**after three hours' engine running in the laboratory using the standard diesel fuel, alone, one or more engine nozzles in the diesel engine exhibits a reduction in the achievable air flow rate of greater than 35%.**"[1] *See also* claim 120.

Berlowitz' states that his "blend . . . provides a fuel having reduced sulfur levels and emissions levels lower than those predicted by standard correlations . . . **by *eliminating* the heavy end** of the conventional diesel fuel and ***replacing* the heavy end with a low sulfur Fischer-Tropsch derived diesel fuel** boiling above the range of a normal diesel fuel." Berlowitz, col. 2 ll. 53-60 (emphasis added).

As seen from the foregoing, the examiner can establish that Berlowitz describes a fuel blend comprising either:

(a) Fischer-Tropsch derived gas oil **comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C**; or

(b) a standard diesel fuel composition that "would otherwise cause relatively high levels of combustion related deposits, for instance a fuel having a relatively high

[1] New claims 90 and 101 depend from claims 86 and 97, respectively, which specify that the fuel blend comprises "an amount of 10% w/w or more Fischer-Tropsch derived gas oil," as in the Examples 1-3. Specification, pp. 20-28. See particularly Tables 1 (p. 26) and Table 2 (p. 28).

endpoint and/or containing relatively high levels of aromatic components." Specification, p. 8, ll. 21-24.

The examiner therefore cannot meet the flexible TSM test with respect to claims 90 and 96 or claims 103 and 108.

Applicant respectfully requests allowance of new claims 90, 96, 103, and 108

-New claims 86-112

The examiner cannot establish that it was *predictable* that a fuel blend that produces reduced emissions and/or particulates, which are emitted to the *outside* of a diesel engine, also would form reduced combustion related deposits on the *inside* of the diesel engine

The examiner admits that "reducing injector fouling and/or engine deposits is not specifically set forth in Berlowitz," but contends that "reduction of particulate matter is briefly discussed in column 7, lines 37-40." Final action, p. 3.

The examiner cannot establish that it is **predictable** that a fuel blend that produces reduced emissions and/or particulates, which are emitted to the **outside of** a diesel engine, also would form reduced combustion related deposits on the **inside of** the diesel engine. The examiner certainly cannot establish that it was predictable that such a fuel blend would produce reduced injector fouling.

The examiner cites nothing in the literature to support such an argument. Even though the "teaching[], suggestion[], or motivation[] need not always be written references," it is legally insufficient for the examiner to rely solely on **examiner argument** to establish that motivation is "found within the knowledge and creativity of ordinarily skilled artisans." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 127 S.Ct. 1727, 82 U.S.P.Q.2d 1385, 1396 (U.S. 2007) (emphasis added). One might just as easily speculate that combustion of Berlowitz' fuel blend produces particulates and/or emissions, but that they are retained in the diesel engine in the form of combustion related deposits.

To the extent that the Examiner may rely on information that the examiner contends is "well known" as supplying any such teaching, applicant respectfully requests that the Examiner supply a rebuttal affidavit, pursuant to 37 C.F.R. § 1.107 (b), or citations, pursuant to MPEP 706.02(a) and 2144.03.

Applicant respectfully requests allowance of all of the pending claims.

The examiner also cannot establish that it is predictable that the claimed fuel blend would *remove* combustion related deposits from any surface

The examiner dismisses Applicants arguments that Berlowitz does not disclose a method of removing or reducing injector fouling and/or combustion related deposits in a diesel engine, maintaining that "the method of the independent clams essentially comprises the step of combusting in the diesel engine a fuel blend comprising an amount (unspecified) of Fischer-Tropsch derived gas oil which is clearly taught by Berlowitz as set forth above." Final action, p. 3.

However, the examiner has not established that it is **predictable** that the clamed fuel blend would ***remove*** combustion related deposits **from any surface**. To illustrate this fact, Applicant has added new claim 112:

> A method for removing combustion related deposits from a surface, the method comprising: providing **a surface** comprising combustion related deposits produced by operating a diesel engine; and, **removing at least a portion of the combustion related deposits from the surface by contacting the surface with a fuel blend under removal conditions**, the fuel blend comprising: (a) a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil and less than 50 ppmw detergent, and (b) an amount of about 10 w/w% or more of Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C.

Claim 112, emphasis added. New claim 112 **does not** "essentially comprise[] the step of **combusting in the diesel engine** a fuel blend comprising an amount . . . of Fischer-Tropsch derived gas oil." Final Action, p. 4. Nevertheless, the examiner cannot meet the flexible TSM test with respect to new claim 112.

If the examiner cannot meet the flexible TSM test with respect to claim 112, then the examiner certainly cannot meet the flexible TSM test with respect to the other independent claims, in which the combustion related deposits are removed during operation of a diesel engine using the fuel blend. The examiner simply cannot establish that **removing combustion related deposits** from a surface was an **established function** of the claimed fuel blend.

As seen from the foregoing, the examiner cannot meet the "flexible TSM" test with respect to the pending claims. *Ortho-McNeil Pharmaceutical, Inc. v. Mylan Laboratories, Inc., et al.*, 86 U.S.P.Q.2d 1196, 1201-02 (Fed. Cir. 2008) (emphasis added). Nor can the examiner establish that the claims are directed to merely "the **predictable use of prior art elements**

according to their established functions." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. ____, 127 S.Ct. 1727, 82 U.S.P.Q.2d 1385, 1396 (U.S. 2007) (emphasis added).

The examiner must first meet the flexible TSM test before Applicant has the burden to provide evidence "that the reduction of injector fouling and/or engine deposits in diesel engines is an unexpected result based on supposedly unpredictability of the blended diesel fuel composition disclosed in Berlowitz." Final Action, p. 5. In any event, unexpected results and superior results are evidenced by the very simplicity of the claimed method. Using the claimed method, injector fouling can be reduced or removed simply by operating the diesel engine using the claimed fuel blend.

Applicant respectfully requests allowance of all of the pending claims for this reason, alone.

-New claims 86-88 and 99-102

New independent claims 86 and 99 also specify providing the fuel blend comprising "an amount of 10 w/w% or more Fischer-Tropsch derived gas oil, as in the Examples.[2] New claims 87-88 and 100-102, respectively, specify the other test levels of Fischer-Tropsch derived gas oil described in the Examples, namely, 50% w/w, 70% w/w, and 100 % w/w. See Table 1 (specification, p. 26) and Table 2. (p. 28).

The examiner cannot meet the flexible TSM test with respect to claims 86-88 and 99-102. For this additional reason, Applicant respectfully requests allowance of new claims 86-88 and 99-102.

-New claims 92-96 and 104-108

New claims 92-96 and 104-108 depend from claims 86-88 and 99-102, respectively, and further specify "providing the fuel blend with a concentration of active matter detergent of from about 100 ppmw to about 500 ppmw," as in the Examples. See Specification, p. 22, ll. 12-15. See also p. 11, ll. 1-15. The examiner cannot point to a teaching or suggestion of this additional limitation in Berlowitz, or elsewhere.

[2] New independent claims 97 and 109 define the amount of Fischer-Tropsch derived gas oil in the fuel blend as the amount sufficient to produce a reduced fouling index which is 6% or more lower than the initial (or first) fouling index. See also claims 98 and 110 ("9% or more lower").

The examiner cannot meet the flexible TSM test with respect to claims 92-96 and 104-108. For this additional reason, Applicant respectfully requests allowance of new claims 92-96 and 104-108.

New Claim 111

New claim 111 specifies a method for removing and/or reducing injector fouling in a diesel engine. The method comprises combusting in the diesel engine a fuel blend comprising 100% Fischer Tropsch derived gas oil and from about 100 ppmw to about 500 ppmw active matter detergent. New claim 111 corresponds to Sample 1.5 (in Table 1) and Sample 3.5 (in Table 2), both of which exhibited the greatest removal/reduction in engine fouling in the Examples.

The examiner cannot meet the flexible TSM test with respect to new claim 111. For this additional reason, Applicant respectfully requests allowance of new claim 111.

Rejection of claims over Berlowitz in View of Bacha

The examiner also rejected claims 46, 47, 52, 53, 61, 62, 73-75, and 81-83 as obvious over U.S. Patent No. 6,663,767 to Berlowitz, ("Berlowitz") alone, or in combination with U.S. Patent No. 6,766,897 to Bacha ("Bacha"). The examiner has not established that Bacha provides an apparent reason to combine known elements **in the fashion claimed**. *Id.* (emphasis added).

New Claims 113-119

New claims 113-119 correspond roughly to canceled claims 36-42 with several changes.

New claim 113 specifies that the diesel fuel composition comprises a fuel blend comprising "a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil and less than 50 ppmw detergent." New claim 113 further specifies that the diesel fuel composition comprises "30% w/w or more of Fischer-Tropsch derived gas oil